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Defense Agencies: Public Provision of Commercial Goods and Services

Internal Pricing Case Study

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Background Presentation by Ms. Debby Christie

Panel:

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Carl Dahlman: Now to a very deep, dark hole called the working capital fund. A cynic might say that it's a misnomer. There's not much to the fund anymore, it's dwindling, and you can ask validly whether it's even working anymore.

I'm not one of those cynics. I'm an economist and I love markets, I love prices. That's the stuff that profits, efficiency, wealth, and growth are made of. We all love the concept. The question is what have we done and what can we do to make it work better.

It began as a simple idea for a transfer-pricing scheme and modeled after an idea that existed in the private sector. If you look at what the private sector has done with internal markets, they have done many different things. Some were used for transferring taxes from one jurisdiction to another - that's not what we're about here.

You can look at large conglomerates that use internal prices for basically everything they do and service providers inside will compete on the basis of a market price against any outsider. Anybody who is willing to come.

As long as you cover your costs adequately measured with good accounting systems, then the company will buy from you and you can sell to anyone inside or outside the company. Or members of the company can choose to buy from you or anybody else outside in the market.

That's using the internal transfer pricing mechanisms based on good accounting as a sourcing decision ensuring profitability and efficiency over time. That is not what we have done in DoD.

It was envisioned as a simple transfer-pricing scheme where you give money to customers and the companies buy from providers and the money is then recovered. That was the basis of it. It has turned out that nothing has been simple in this world of the working capital fund.

Instead, we have sort of become mired in technicalities. How do we define a unit cost? What should be included in it? How do we set the requirement correctly? How do we include capital purchase program investment expenditures in the price? How do we set surcharges and cost recovery rates on top of the existing unit costs?

If things go wrong and it turns out that an activity loses money, whose fault is it? Is it because the unit cost wasn't set right? Is it because the producer decided to take on work that really wasn't funded? Is it because the customer diverted funds to doing something else? Is it because the people who program within each service decided to take money and put it elsewhere?

So all of this has sort of become mired in a very complicated discussion about technicalities and often finger-pointing. So we created this monster. As I said, as an economist, I think it's a wonderful blue furry monster. Unfortunately, it gobbles cookies like nobody's business. It's proved very, very difficult to manage.

That's really what we're here to talk about. Not whether the working capital fund should be here or not be here. Given that it's here, can we come up with some ideas for how to improve it or manage it better? Hopefully using some economic principle because this is what this is about, the defense economics conference.

That leads us to the next problem in this area, which is given that we have problems, who do you turn to for solutions? Here we have an interesting debate that has been going on for a long time involving the financial managers who actually own and run the working capital fund (WCF). They regard the WCF essentially as what I just said earlier. It's a cost recovery mechanism.

You give money to the consumers, set the requirements, and the producers earn the money and the money flows back into the capital fund. What could be simpler than that? It's just a cost recovery mechanism. If the fund runs low, we should fix that in setting new stabilized rates next year, two years before execution and then live with that.

So we fix everything in the rate setting. As economists, we are fixated on prices and the incentives associated with that, so we have worried a lot about that. Then there are people in this room who have studied with empirical data what kind of incentives have been created by the WCF itself. It has been found that if a local activity can make more money doing something locally than having it paid for in a depot or elsewhere, they will tend to do it locally and save the money.

We have seen that there have been incentives built into the system for various activities to not be managed in the way that the working capital fund has envisioned that they should be. So incentives really work. This has led us to question whether we can think of different things than basic simple unit cost pricing to drive behavior in a different way.

Looking at old arguments in economics, we have come up with this idea of dual pricing, which I think has been debated around the working capital fund ever since it's began, more or less. Industrial funds are all in the department, but expanded. Why not have a more complicated pricing scheme that induces more efficient behavior?

That has led to this discussion between those who manage the fund, the comptrollers, the financial managers, who simply view it as a cost recovery mechanism and say they're going to fix everything in programming/budgeting, versus economists who say, well, can we figure out better incentive schemes to get this internal market mechanism to work.

That is what we are here to talk about today. To try to get this cookie monster to go where you want him. How can we use pricing to do that? The example we're going to use mostly is DISA. So here's the order of affairs today. Debby Christie, who we introduced earlier, will begin. She will make a presentation of her paper and then we'll have a discussion among the panel members and I'll introduce them later.

WORKING CAPITAL FUNDS 101

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Debby Christie: This will be a two-part presentation. The first part is going to be working capital funds 101 in case there is someone here who isn't familiar with the basic principles involved. I'll try to skim this quickly, because I suspect most of you are. And then I'll go on to a case study and two-tier pricing as a particular example.

WHAT IS A WORKING CAPITAL FUND?

- An account at the US Treasury through which the operations of one or more activities (organizations) are funded
- DOD has five WCF
  - 3 for Military Department activities
  - 1 for Defense-wide activities
  - 1 for the Defense Commissary Agency
  - Plus several revolving funds

What is a working capital fund? At its simplest, it's an account at the U.S. Treasurer through which the activities of a specified collection of things is financed. Their people, vendors, and contractors get paid out of that account. Money that they collect from a variety of sources goes into it and there it is.

We have five in the Department of Defense listed up there. Then there are a bunch of revolving funds that operate under basically the same rules, but they just don't happen to be called working capital funds right now.

WHAT TYPES OF ACTIVITIES DO WCF FUND?

- Supply
- Depot maintenance
- Transportation
- Communications
- Information processing
- Finance and accounting
- Printing and publication
- Personnel security investigations
- Commissaries
- R&D and public works (DON only)

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Here are the activities that we fund. Not all activities occur in any one fund. Obviously, there's a one to one correspondence between the commissary fund and commissaries. A lot of those just occur in the fund for defense-wide activities. All the military departments have supply and depot maintenance. The Navy, uniquely, actually funds it's R&D and public works through a revolving fund.

HOW DO WCF ACTIVITIES OPERATE?--1

- Like a business
  - Acquire, capitalize and depreciate assets
  - Get orders from customers
  - Do work or sell goods
  - Pay employees and vendors
  - Bill customers, collect some payments, and have bad debts
  - Maintain working cash and take out short term loans by billing in advance
  - Make a profit or loss in any particular year

They are the closest thing to a business we have in DoD. Like a business, they do all of the things listed there. Get orders, do work, pay people, have bad debts, take out short term loans, have working cash, and make profits or losses.

HOW DO WCF ACTIVITIES OPERATE?--2

- Like a regulated utility
  - Have a monopoly in some cases
  - Must meet needs of all customers
- Like a not-for-profit
  - Try to break even
- Unlike a business
  - Mission support is paramount
  - Charge rates set in advance (stabilized rates)
  - Maintain “mobilization” capabilities
  - Operate under restrictions that do not apply to private sector entities

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In a lot of ways, they are like a regulated utility. They have to meet the customer need, unless it's totally outrageous. Yet when we suddenly need communications in Uzbekistan, DISA doesn't have the luxury of saying, “Gee, I'm sorry - that's outside my service area." They are there to do that.

In some cases, we also have monopolies and I'll talk a little bit more about that. Like a not-for-profit, they try to break even. Yet there are a lot of ways in which we are not like a business. Mission support is paramount, and for that reason, we do some un-business-like things.

Charging rates that are set in advance is one of them. Those are the so-called stabilized rates. I will come back to that again in the future too. They also maintain what are called mobilization capabilities, although that word is a bit misleading. It really covers capacity surges, which generally are for contingencies or mobilizations.

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There are also some military-unique capabilities. The cranes that operate on Navy piers have to be able to lift nuclear weapons. In addition a variety of other operations have to be able to deal with nuclear weapons, which is not a skill you can march right into the private sector and buy.

Also, because they are government entities, they operate under a lot of restrictions that do not really apply to the private sector. These include government personnel laws and the congressional restrictions on base closure and things like the Davis-Bacon Act. You can name a million of them.

All of these have been a bit frustrating to the managers out there who are urged to behave in a business-like fashion and then not allowed to for a variety of what are perfectly good reasons. But nonetheless, all apply.

BENEFITS

- Greater efficiency through pressures of market on buyers and sellers
- Protection of readiness through stabilized rates
  - Ensure adequate funding for expected activity level
  - Fund can absorb losses in the short run
- Cost visibility
- Some greater flexibility in use of funds

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Why do we do this? One of the strongest arguments is that you get the pressures of the marketplace to bear on both the buyers and the sellers, which will lead to greater efficiency. People won't buy stuff they don't need and sellers will try to become efficient to keep their market open.

In some cases this has worked. In other instances it has not worked. Sometimes the services have chosen not to pass the money all the way down to the end user and pay bills more at a higher level. Sometimes the end user doesn't really have a choice; at least in the short run and maybe in the long run.

Ideally we would like to use the funds to show us where using private-sector providers could save money. A problem is that there are some cases where private firms provide services that are similar, but not identical to what Defense Agencies now provide, and where it is not clear how to induce the private sector to develop the needed capability. Military pay is a good example. Many people in the private sector provide payroll services. However, both DFAS and the Navy went out and looked at what they could get and found a real sticking point.

BENEFITS

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No one was willing to figure out military entitlements, at least not without a protracted period of time to develop the capability to do that.

Anyhow, the second benefit of working capital funds is that they protect readiness through stabilized rates. You set the rate in advance and you adjust the customer budget so the customer has enough money to pay for his expected level of activity at that rate.

If there are deviations from expectation and they are not too huge, the fund can absorb those losses in the short run. We saw this in fuel prices in, I think, 1993. There were several years when fuel prices spiked. We would have had great difficulty if we would have had to pay those higher prices right then.

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It would have been difficult if we had to wait until we could get a re-programming action through Congress in order to pay those prices. So the WCF provided a good mechanism.

Another argument that's made is cost visibility. It is true that we have a better handle on costs in working capital funds than anyplace else in the department.

This isn't an inherit feature of the funds however, it's a sad commentary on the rest of our accounting systems. I would contend that everybody could use a little cost visibility, but we just haven't gotten around to that problem.

Certainly there is greater flexibility in the use of funds. Money that gets into these accounts loses its fiscal year and appropriation identity. We have the flexibility to buy capital assets in advance and recover them through rates over their useful life. We have the flexibility to buy in anticipation of customer orders, which is essential for long lead items in the supply system. Those are the four principal benefits that people have suggested.

WCF AND THE PRIVATE SECTOR

- WCF have a monopoly by law or policy
  - And do most work in house
  - But use extensive out sourcing
  - Monopoly only extends to a portion of work
- WCF have a de facto monopoly in short run
- WCF have won public-private competitions
- No private sector entity has bid
- Customers have freedom to choose

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Several times today it has seemed as if people thought about defense agencies as an alternative to going to the private market. It is a much more complex situation than that. In a lot of cases, what the agencies effectively are doing is bundled out sourcing. They are really using the private sector.

I listed some of the situations that apply. We have monopolies in law or policy. In some of those cases, we actually also do most of the work in house. In some cases, like the DISN, policy is that people are supposed to use the DISN, but most of that capacity is actually bought from the private sector.

We have a by law monopoly on half of the depot maintenance work. Most of the rest is done outside. I mentioned military pay, which I think is an example of a de facto monopoly, at least in the short run. It is entirely possible that at some point you will be able to induce one or more external vendors to develop that capability. We may merely exchange an internal monopoly for an external one, or we might actually get competition. It depends on how we do it.

WCF AND THE PRIVATE SECTOR

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Sometimes cumbersome as A76 is, we've gotten through it. Sometimes the public sector wins and sometimes the private sector wins. I'm told there have even been occasions when nobody wanted to bid on our work. We are a hard customer sometimes.

There are a few places where the customers can go where they choose. Nobody has to buy R&D from the Navy labs if they can find someplace else that is more satisfactory.

SETTING PRICES (RATES)

- Break even on an accrual basis
  - Covering all costs except mobilization costs
- Ensure adequate cash
- Recover unanticipated losses or return unanticipated profits from prior years

Let's talk about setting prices. There has been some discussion today about using prices as an incentive mechanism to the customer. The first thing we try to do is recover costs, except for some that are specifically excluded. I'll come back to that in a minute. Of course we also have to make sure that we have enough cash. If you run out of cash, you not only find yourself having violated criminal law, but you have to quit paying people and that's an unhappy event.

Since we are trying to break even in the long run, you may be setting your rates in order to return prior year gains or recover prior year losses. Beyond that, there are some specific instances where the system has been set up to provide specific incentives.

PROBLEMS IN SETTING RATES

- Customers do not know their full costs
- Allocating overhead
- Recovering mobilization costs
  - Policy is to exclude them from rates
  - Not always done
  - Major examples
    - Marginal cost of moving cargo on military training flights
    - DISA's mobilization costs

If you want to use rates to incentivize customer behavior, the customers really have to understand what the alternatives cost. In a lot of cases, they don't see those costs. Navy has shipyards and they have intermediate maintenance activities. You paid for the work in the shipyards and you didn't pay for it in the SIMAS. Guess where people went when they could? To them, it looked free. It wasn't free to the department.

Allocating overhead. You can easily distort the apparent cost of something by your overhead allocation scheme. Whether you do it on a per item basis, by some way proportionate with the cost of the item, or by some other scheme, you can make the price appear to be perfectly reasonable or absolutely outrageous.

Recovering mobilization costs is a difficult one. The policy says they shouldn't be recovered in the rates. That is done in a couple of major cases, but it isn't always done. Most of these activities are going to have some mobilization costs.

PROBLEMS IN SETTING RATES

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I'm indebted to my colleague Mr. Hutten for the example of cranes on Navy piers that have to have a surge capability. If the fleet suddenly gets ordered to go somewhere, business is going to surge fairly intensely. They have to have things like the capability to handle nuclear materials.

So the price that they charge would appear to be higher than if someone priced the same service from a place listed in the Norfolk phone book. I doubt, however, that those mobilization costs are excluded from the rates. I suspect they are included in the rates.

We do have two major examples, however, of where we have excluded them and where the costs are pretty substantial, too. There is a good argument for doing it. When we do military cargo aircraft pilot training flights in a lot of those cases, we could move cargo. So we would certainly like to do that, rather than fly those flights empty and then pay to move that cargo on a commercial aircraft. We price that flight at the commercial price and then the Air Force pays the rest. That's pretty straightforward.

COVERING DISN MOBILIAZTION COSTS

TWO-TIER PRICING

WHAT ARE MOBILIZATION DISN CAPABILITIES?

- Excess capacity
- Military-unique features
- Cost to get into the long-haul system

The other one is the example I'm going to be talking more about, which is DISA's mobilization costs. More precisely it is DISN, the information communications network mobilization cost. Since DISA does things other than run the DISN.

They've really identified three sorts of generic types of mobilization capabilities in the DISN. Several are related to capacity. This is capacity excess to what we would normally need day to day for wartime surge. This is needed to ensure a very high probability that when you lift up the phone there is a circuit available for you and to get you coverage in all of the miscellaneous parts of the world where you may or may not be on a day-to-day basis, but you might go.

WHAT ARE MOBILIZATION DISN CAPABILITIES?

- Excess capacity
- Military-unique features
- Cost to get into the long-haul system

The others are military unique features. Sometimes these are truly military unique. Generally they are things like a higher level of security than the private sector would normally provide to its customers. In a few cases, we have valued something highly enough that we actually want to own it ourselves. In other cases, it's software or something like that.

And the final one, if I got it right, are the costs to get from either the telephone or the computer into the long-haul system. Arguably, that's part of the cost of buying the service. But this is one of those where the customer at the end usually can't see these costs. So if you throw them into his bill, he's going to say "that's more expensive than what the local phone call will charge me or what the local long haul company will charge me."

THE PROBLEM

- DISA was including all costs in rates, making rates higher that those charged by the private sector
- Customers were buying directly from the private sector vice using DISN
- Total costs to DOD was higher than necessary

So we have those three types of capabilities. Now they were all in the rates and that clearly made the rates a bit higher, sometimes substantially higher. People would perceive they could go out and buy peacetime capacity directly for a lower rate. So some customers would do exactly that. Therefore DoD was paying twice because it was buying enough capacity to cover day-to-day demands plus surge with all of these other special features. Then the day-to-day capacity was not getting used.

THE SOLUTION

- Charge customers rates at (or below) commercial rates (Tier 2 costs)
- Divide remaining costs (Tier 1) among Services and Agencies to be paid at the corporate level (Service Level Bill)
- Implemented in the FY00 budget
- Eliminated the cost incentive to most customers to buy directly

The solution arrived at in the summer of 1999 was to break the problem up in two parts. Charge the direct customer a rate that is at, or below, commercial rates. That's referred to as tier two costs.

You then divide the remaining costs up among the services in defense agencies to be paid at the corporate level. That's tier one. The bill is called a service level bill - those terms get thrown around here. This was implemented that fall, very quickly. It did, in fact, eliminate the cost incentive to most users to get off the DISN.

IMPLEMENTATION

- Problems
  - Determining commercial rates
  - Relating remaining costs to mobilization costs
  - Allocating Tier 1 costs
- Evidence of success
- Remaining issues

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There has been a fair amount of migration that has happened back on the DISN and some that is planned. I'll come back to that in just a minute. There are a few problems here. There's no single commercial rate for a particular type of service. Rates are set by region. Even within a region, as anybody knows who has gone out and bought phone service lately, there are many different prices.

Then there's the question of what the costs are attached to these mobilization capabilities that we're supposed to be excluding. I'm told by people who participated in exercises to try and identify those costs that about 80 percent of the cost is clearly allocatable to tier 1 or tier 2 without many arguments at all. The other 20 percent is largely arguable. I believe the current figure is about 25 percent of total DISN costs are believed to be a reasonable estimate for tier 1.

IMPLEMENTATION

- Problems
  - Determining commercial rates
  - Relating remaining costs to mobilization costs
  - Allocating Tier 1 costs
- Evidence of success
- Remaining issues

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Then there was the question of how you allocate tier 1 costs among the military departments and agencies that use them. The sort of solution that has been worked out is DISN is allowed to negotiate some pretty favorable prices. They have been able to offer their customers rates that are at or below, and sometimes pretty substantially below, what most of them could get on the market. They still cover everything except the roughly 25 percent that's a mobilization cost.

For simplicity and ease, that remaining part is broken up according TOA. I'm told that a variety of different ways of allocating it was looked at. Most of them came up with about the same split as the previous one. There was a suggestion of allocating it based on usage. That incentivizes you to get off the DISN so you drive down your share of the tier 1 bill. This then needs to be paid by someone else.

So the notion was to allocate it based on something that was hard to game. If anything, people have an incentive to increase their share of TOA. This was a pretty hard one to game just to reduce your DISA bill.

Evidence of success. One thing that it's done is sort of end the question of why you are charging me more than what I could buy it for in the private sector from the end user. It has shifted the question to the right place, which is what is all of this mobilization stuff we're buying? Do we really need it and do we have the right price for that? That's where the debate ought to be. It should be on those marginal costs.

As I mentioned, we have seen some switching. Dave McNicol just provided me some data that he had been able to glean here. There were 103 of this off-DISN networks identified. of which 22 were selected to migrate by 2007. 12 of those are finished. There were another 31 that either did or are in the process of migrating at their own choice. We've got another 50 that are hanging out there that we're not sure what they are.

It seems likely that the creation of two-tier pricing has slowed the creation of new out of DISN networks. Two issues remain, I think. One I've already talked about, and that is what the right price is for tier 1. Now I understand that there is also a re-opened debate about where that ought to be paid for with at least part of the Congress opining that it may be funded by DISA. That is, in the DISA budget directly, rather than funded in chunks spread around.

Pretty clearly, spreading it around the service and defense agency budgets provides them customers and gives them an incentive to look hard at it. Putting it all in DISA probably doesn't accomplish that objective as nicely.

The final one is the question of getting the money down to the customers. That's done in some services, not done in others. If you don't give the money to the guy who actually buys the communication capability, then you've lost the benefit that you hoped to gain.

Thank you.

Carl Dahlman: From OSD, Admiral Bob Nutwell. Please, go ahead.

Adm Nutwell: I appreciate the chance to participate in this forum. Dave, thank you for the invitation. I left OSD last December. It's amazing how quickly you start feeling like an outsider. You can't get to the Early Bird, you can't get any of the promotion lists, status and all.

So it's nice to be back with the family and see some of my old friends, including this gentleman on my left here who shared the yoke with me on a few non-controversial issues like two tier pricing. Obviously I'm not an official OSD spokesman, but I'll give you my perspective of OSD's view, as I was there on the two tier pricing.

I also took the time to poll the customers and got some feedback, which I'll kind of amalgamate so I don't have to attribute it to any particular source. But it will give an idea of the customer's views are on two tier now.

I'm probably going to focus more on the policy than on the implementation details. Debby gave you a pretty good background on how we got to where we are on two tier. There was a front-end analysis that PA&E did in October, '99. Looking at voice data, video, and transmission of those four areas that the two-tier policy addresses. Of course she explained the meaning of the two tiers.

I think I agree that the principal rationale here was to incentivize use of the DISN services and try to capture some of these rogue networks. I think an indirect, underlying purpose was to promote equitable sharing of the DISN costs and more cost effective funding of the DISN by the DoD.

Of course the problem we had was that some customers were using the DISN and others were not. There was a kind of an off-loading of cost to the users. That reduced the overall cost base so you didn't really have as efficient an operation as you could. That was kind of an underlying incentive.

One of the questions that has come up continuously and still comes up is: Why can't DISA be more competitive? Why do we have to have this tier one concept in the first place? I think Debby explained it pretty well - it's really those mobilization costs that DISA has to incur that most commercial providers would not have to incur. Providing communications to Diego Garcia or Guam, things like that. Certainly the surge capacity that we have to carry for war fighting is clearly a mobilization cost.

We can't expect DISA to be totally competitive with the commercial market for telecommunications. We have to have some way to pay those costs.

I think there's a higher rationale here that we need to keep in mind. It is that DISN is probably the most critical piece of the infrastructure that enables the department to accomplish its mission. We have to take care of DISN. It's the core of our infrastructure.

As we get deeper and deeper into transformation and to network-centric operations, DISN is our key enabler. So we have to take care of it. We have to fund it properly. We want to do it in a cost effective way, but we can't do it in a marginal way. We can't treat it as just a piece of infrastructure that we can allow to wither. We have to take care of it. That's really the underlying gut issue here.

Of course the benefits the department accrues from a well-funded, properly operated DISN are all those value added services that we cannot do without. This includes the NIPRnet, the SIPRnet, the red switch, etc. and also inter-operability. We could not have the inter-operability that we have now if we allowed each of the services to go off and do its own thing with whatever commercial provider they want to pick. We would not have the inter-operability that we need to operate the department. So that's a key factor in taking care of DISN.

Debby talked about the implementation issues, how to set the rates. The front-end analysis proposed that the rates be set 10 percent below commercial rates to provide a really good incentive. I'm not sure exactly how that came out. I think in general they are below the commercial rates. Maybe Bob will talk more to that.

The FEA said that they should be adjusted to ensure that revenues do not exceed cost by product line. So this wouldn't, again, be a profit making measure. Now, how far below the commercial rates, the commercial benchmarks, the rates should be set is an issue. Whether it's 10 percent or 20 percent. If 20 percent is okay, maybe 30 percent. Where's the limit there?

What happens if you go to zero? Everything is in tier one, so what's wrong with that? I think there's an issue there that we ought to think through. What are we really doing here? What's the benefit of this two-tier concept?

Debby talked about the issue of how to calculate the tier one bill. I tell you, there's two questions. One is how to calculate the bill and the second one was how to allocate it. The first question, one of the strategies that we looked at, was trying to add up all the components. That turned out to be very difficult. What are all those mobilization costs that we have to pay that really shouldn't be in tier two?

It is my understanding that it was decided, and the way it's being done now, is it's really just the delta between the revenue that you are getting from tier two and the total cost of doing business with the telecommunications infrastructure. What you lose there is some visibility. What are those costs and how much should they be? We've lost that.

Now the really controversial issue was how to allocate the tier one bill among the services. Lots of blood was shed on this. Probably personnel was the favorite way to do it. I'll tell you there is at least one service that still violently disagrees with that and thinks that it should be done according to usage despite the fact that that's totally contrary to the whole idea of incentivizing, getting on the DISN.

So how has it worked? Well, Debby had some good numbers there. I guess the first criterion is that DISN is still operating and the customers are not in open rebellion. So it hasn't been a total disaster. In fact, there has been clearly some progress in getting folks on to the DISN. This is probably a good metric, since that was the original idea. Perhaps not as many as we hoped, but some progress. I'll defer to Bob Hutten on further discussion of that.

One issue that the services are concerned about is that T-1 bills come very late in the budgeting process. It's a problem for them to program and budget for the T-1 bill because it's being passed down as a tax after we calculate the delta. That was a common complaint.

Another issue - I guess I'm getting into kind of the unresolved issues here. Debby talked about a couple of these. For one thing, some of the customers don't perceive the DISA rates as being less than the commercial rates that they could get. I realize part of that problem is that you've got rates that vary around the country. Some of this is probably selective listening too.

Still there's a perception out there that they are really not getting these great rates that they were promised. Probably one of the biggest comments was this process really doesn't address the fundamental issue of the efficiency of DISA in providing telecommunication services to the department.

This is not a criticism of DISA at all. It's a fundamental question with monopoly or utility type operations. It's how do you assess the efficiency. Two-tier pricing doesn't really get to it. So therefore it really doesn't promote cost effectiveness.

It also removes DISA's incentive to provide the required services at the lowest cost because there's a built-in mechanism to cover their total cost. Now I know that they are making strong efforts to provide lowest cost, but there's no incentive there to do it that way.

I think the performance contract, which has, as the last panel mentioned, kind of evolved to an animal all of its own, can help to promote efficiency and the delivery of services given adequate metrics.

Another related question is who validates the expenditures for tier one? Who says that they are really meeting valid military requirements, as well as being provided in a cost effective way? That's still an issue that is out there.

Another one I guess I could have mentioned earlier is, when you talk about incentivized use of the DISN, rates are not the only factor. Responsiveness of the service and availability of the service is also a big factor. In some cases it's been one of the complaints that a particular service or a particular line was not provided as quickly as they would like. That sometimes has encouraged them to go to commercial sources.

Finally, probably the most fundamental issue that was raised was that two of the services felt very strongly that the DISN should be funded by appropriated funds. That we shouldn't be doing this DWCF stuff at all. Their rationale is the DISN is a critical piece of our infrastructure.

For the last couple of years we have been treating C-4 systems as weapons systems and we're starting to think about them as weapon systems and treat them that way in terms of engineering and programming and budgeting. So why shouldn't we treat it as a weapon system and give it appropriated funding?

That's still a very strong perception that's out there. That would solve the late tier one bills because now you're not taxing the services, you're just taking it off the top. Presumably there's the standard requirements process to validate the requirements. The services don't get it - they're going to pay for it anyway, ultimately out of their TOA. It's a lot less painful way to do it because they don't get this last minute tax and it doesn't come down as a tax at all. They never even see it.

That's kind of the most fundamental issue that we ought to grapple with in the discussion session is whether that's a better way to fund the DISN. So in sum, I guess I'd say that two tier pricing can be viewed as kind of a modification. Some people might say a corruption of the DWCF strategy. But it probably has had some moderate success in incentivizing people to move on to the DISN. But these larger issues still need to be addressed.

Thanks.

Carl Dahlman: Thank you. If any of you have looked at a local telephone bill lately, you have seen a multitude of tiered pricing. An access charge and then you're charged - not for local, usually, but for long distance, a marginal cost. Then look at all the other little rates in there.

The advertising by telephone companies of very low rates are usually made up by surcharges for this, that and the other thing that are specified in your telephone bill. It's become an extraordinarily complex pricing structure. So we hope that's not what you have done in DISN. Bob? Bob is the director of strategic planning in plans, programs and policies for DISN.

Bob Hutten: It is hard to know where to start. Let me start with where two-tier pricing originated. It really originated in the CSARTs. The CSART team before last found that the CINCs were very upset that there were numerous networks appearing in their theater that were not inter-operable.

They didn't have any control over this. They couldn't reallocate the resources. They knew the rogue systems had extremely spotty security, if any security. What they wanted were people to be on an enterprise network. The rationale for having a DISN in the first place was that DoD should have an enterprise network for all those types of reasons.

The other rationale is the economic one of you can bundle requirements and gain economies of scale. Economies of scale are very strong in telecommunications industry as you move up the scale from a T-1 to an OC3 to an OC48 to dark fiber.

You can gain tremendous economies of scale as you move up, plus you don't need all the attendant operational capabilities, the people, the infrastructure, and the facilities that are duplicative. So there was a good military reason that's based on the mission and policy for the DISN and there was a decent economic reason also to pursue it.

One of the things Deborah said was really true. Most often when you get compared to inside DoD it is, “Well, you're charging and I get this free, because I have appropriated money and after all, the procurement money is sunk. The military people don't cost me anything. The facilities were there to begin with.”

People who live on appropriated funds, quite frankly, don't think full costing at all, don't understand it, and don't want to understand it. However, the sound bytes are good. You cost me five times as much as I was going to pay otherwise.

They don't mean to be comparing you in most cases to a full-blown service from somebody else. They mean to compare you to just buying transport from somebody else and then buying equipment.

Then there was Motorola and Iridium that's another good one. The telecommunications industry is filled with sham about pricing. There are not that many profitable companies in it. The stock market is pretty much spoken on that over the last year. Those of you who went out and bought in telecommunications funds probably understand that better than I do because I'm prohibited from doing it.

That's kind of where we were. We had a policy driver and we had a mission driver out with the CINCs. We had this comparison between appropriated, which looked free, versus DWCF, which didn't look free. We had kind of a chaotic marketplace. All those things were kind of driving us towards DISN.

So we got a recommendation out of the CSART report that said appropriate the whole thing, which is a really worthy idea. Joint staff right now is processing an action that would turn both the SIPRnet and the NIPRanet into "C squared" networks. Almost everything else we do today - the red switch is the CINC conferencing network. It's there for really military reason. The other networks are there for a very military reason.

As Admiral Nutwell was talking about, if you look at what's strategic to DoD in the quadrennial defense review, it's hard to read down those six goals and not find IT either explicitly in at least three of them. Implicitly, strongly implicit, in three more.

It's strategic - it's absolutely strategic. The concept, network-centric warfare. Concept diffusion. What is sometimes called a ubiquitous secure global network is part of the vision. It's pretty hard to get an ubiquitous secure global network done as a thousand different acquisitions that aren't coordinated. What you get is a whole bunch of hodge-podge things that don't work well together and you can't understand, you can't defend.

So that drove it. Jay Dodd took us in to see Mary Margaret over here and then we went to see Dave McNicol. We said, “Hey – look, here's what everybody is saying. We've got a problem here." We have a policy and a mission to do. We've got all sorts of distortions in the way people compare costs from one thing to the other.

She was running the DWCF reform task force and Dave had his normal job in PA&E, which was harass DISA. In this case we were able to appeal to his economist bent and say, “Hey, we got a problem for you here that an economist would love to solve." It is how to look at this and find a better way to get the behaviors you want.

Now this isn't at all unique to DISN. In my previous job, I was king of roads and commodes for the Navy down in Norfolk. I was the business manager of the public works center. Rates charged had all sorts of incentives for certain types of behavior. Handle hazardous waste correctly. Things we got charged from utilities.

The Navy is the biggest buyer of power in the state of Virginia, from Virginia Power. They work on schedule 6 down there. Fifty percent of the bill is an energy charge and the other fifty percent of the bill was based on the highest peak you set in a year.

What Virginia Power is trying to do is keep you from setting a high peak so that you do load shedding and all those other things. They are really trying to encourage certain types of behavior.

So costing and pricing are two different things. You cost so that your managers understand how to manage. You price to incentivize certain types of behavior and achieve certain strategic goals with regard to new things you want to offer. Or, in the case of DoD, ends you want to achieve.

The end they wanted to achieve was - well DISA, we don't want you to skate. We want you to come over and tell us about your costs. We still want the supplier/buyer thing. On the other hand, we do want to incentivize people to get on the DISN.

So that was kind of the compromise we worked for. We went in and briefed Dr. Hamre at the time. He said, "I understand perfectly. I wish I'd thought of it for DFAS." He was the comptroller.

We were planning to implement it in 2001. With a year we would be able to get the customers used to the idea. Let them budget for it and all that other stuff. Being a fairly shrewd person, he said "well look, I want you to implement it this fiscal year, October 1st." Yes, he did. He said, "That's because I'm here, and this won't happen unless I'm here."

That was true and I understand it. He thought it was a good idea. He wanted to get it in place. He wanted to try something different to see if we could balance out this issue of how do we keep cost consciousness inside an operation while still trying to get the enterprise behavior that we want.

So this was the core of all this. Now DISA is partially an appropriated activity and partially a DWCF activity. The mission and the criticality of networks right now, I think tends towards a much stronger case for directly funding the network piece that is now DWCF, for a variety of reasons. Not the least of which of all the things you have to do to defend it.

Our vice director is also the computer network operations network joint taskforce commander. We run the defensive information operations, the capstone operations from the Department of Defense, out of our headquarters there. Some of the expense, considerable inside the DISN, goes to do that.

These expenses include the types of things we put in there for intrusion detection, the type of firewalls, the type of tools we have there, the people we have to analyze that data to formulate response, the other types of equities that go in there, the military. Some of that is covered by the IA program, some of it is the DISN people that are there today.

Let me talk about a couple of other things and then I'll stop. The word "monopoly." I don't subscribe to that word for a variety of reasons. Not the least of which is I don't really have the type of powers that a monopoly has - DISA doesn't.

We have oversight from all sorts of places that help us determine what we do, how we set rates, how much money we have. We're anything but independent in our pricing mechanisms. We go through a PPBS process. We have a resource management committee that consists of our customers. We have the MCEB that looks at our pricing sometimes. We have the CSART teams that come in and look.

We have, depending on which cycle of the PPBS you're in, we have front end assessments or issue teams in the summer. I mean, we don't have those types of powers. We are much more like a utility. A highly regulated utility. We can't refuse.

As Deborah was talking about, we can't refuse service to people. We have to provide. In fact, the customers that are probably least able to pay and the hardest to service are the ones we want to service most. That's the deployed force.

That's what we're all about in DoD. They're the guys that if you give them a break, the rest of us pay for it some. We're a mission driven organization. That's what we're going to do.

You can't commercialize some of the stuff we're doing overseas. There is no way. You can hire contractors to help you do that, but there's no equivalent. Now the other thing I guess I wanted to say in all of this is what about sourcing?

Almost all our dollars end up in hands of private enterprise in one way or the other at the end of the day. It's not whether you outsource; it's how you outsource. We believe IT is strategic to the department. We're going to keep a level of control over it so that we can secure it, defend it, manage it, and understand what the infrastructure does.

We are rarely going to buy from cloud services where you just plug in at one end. You don't know where it goes, it comes out the other end some place, and you don't know where your children are at night. I'll give you a good example of why not. Last week we were tracking something coming from an Internet service provider from Crystal City into the Pentagon across the normal commercial service.

It went by way of New York to Canada to an intelligence agency in Moscow and back to the Pentagon. That is why we don't believe we're ever going to let go of this in terms of just letting it go. You cannot do it. You get denial of service. You get people reading your things. Leadership of the DoD is really happy to use Blackberry a lot. Well, Blackberry has a number of vulnerabilities -- quite a few from an IT standpoint.

You can make it more secure by certain practices, but it has a lot of vulnerabilities. You've got to watch those things. You've got to be careful. You've got to assume there are smart people out there after you, and you've got to have smart people at your end who understand your mission that are taking care of that. So that's the security piece.

In terms of what we charge, right now people out in the field pay 2.6 cents a minute for voice call in the United States. It does not matter where you are to where you're going. If it's not a local call, you're going to pay 2.6 cents.

That's a highly competitive rate. You don't get that at your house. Major firms don't get that. The FTS 2000 benchmarks right on top of FDS 2000. Even if you throw in tier one, it's only 3.4 cents. It's an extraordinarily competitive rate.

The other piece of the rate I wanted to explain - one of the things Dave insisted on was that we got our rates to be commercial analogs as close as possible. We include the same types of things they do. What happens if the guys like PSINet had something like "meet me billing?"

”Meet me billing” means you pay for the access line separate from the overall service across the backbone. So to get to that type of service provider, what we did is put the access line into the tier one for the IP networks so that we can then compare accurately day-to-day what we would compare with the guys like PSINet. The big difference is that they're not around to compare it to anymore.

Carl mentioned how the rates are so complicated. They really are, and they are designed to bamboozle and confuse. Ours are not that complicated. We don't make a call and pay 50 cents to get the call set up, and then after that, it's 7 cents a minute. We don't have 99 cents for 20 minutes when they know the average call is under 10 minutes. So it looks like you're paying 5 cents a minute, but they are really paying 10 point something.

If you look at those types of things, you often get a rate quoted to you that when you dig into it, simply doesn't compare. That's where we are and what we're doing. Right now, we're just really busy. Enduring Freedom - the capacity surge for Enduring Freedom to Southwest Asia was on the satellite side 700 percent. On the terrestrial side it was about 300 percent. That is a huge increase. You have to have the backbone. You have to have the contracts in place to handle that.

What we try and do is put competitive contracts in place so that we can compete vendors constantly against each other. On the satellite side, we had three vendors. So on September 12th, what we did is asked them all for a bid. We already had these contracts in place. On the computing side we have capacity on demand contracts. These are 24 hours, the guy has got to have new equipment in your defense enterprise computing centers. Or in some cases, they have to have it on your floor.

So we try to handle the surge and do the military thing at the same time at the best cost. So that's kind of it.

Carl Dahlman: Thank you, Bob. Well, you made a statement that I think is worth repeating. Cost and price are two different things. Now that's a statement to make any economist feel warm and fuzzy and make your heart beat faster. I think that statement alone differentiates us from the comptrollers. They insist on unit cost, full cost recovery, and price equals the unit cost. Perhaps too simplistic, but it's worth a thought.

Next we have the customer's perspective from Don Tison who is deputy director in Army PA&E. This was supposed to be a customer-provider relationship with the customer over time. It's supposed to not just put money on the table, but also be a vocal spokesman for how to manage activities better on the provider side. So we'll see what he has to say about two-tier pricing. Don?

Don Tison: You know, it's great being away for a year. I had the opportunity to sit in on a discussion this afternoon to dissect the meaning of the definitions between homeland defense and homeland security for the defense planning guidance or I could come here and talk about two tiered pricing. I understand there's a wine and cheese reception to follow and it's on the way home, so here I am.

Let me make a couple of comments because Bob is being much too nice to me. I was a culprit in part of this. Just to give a little more background from my perspective on how we got into this.

There really was a combination of several things that led us to have this discussion. One thing was the work that was mentioned in the previous panel on defense agency contracts, which had looked at ways to better incentivize the process.

Also, there was an initiative that Mary Margaret Evans is keenly aware of, and that was from Admiral Hooley who launched yet another investigation of the working capital fund under the auspices of the DRI. I sat on a panel, co-chaired a panel with Marian Whitmore that looked at pricing options. One of the areas we looked at was marginal pricing.

When you put those three vectors together: one, the emphasis on the performance contracts, two, the CSART initiatives and look at marginal pricing, this popped up for two tier pricing, which is pretty much where we ended up.

One of the concerns as previously explained was issues of cherry picking. In other words, rates that could be found cheaper in the commercial sector and you'd have folks essentially buy out of the DISN at which case revenues would decline. You couldn't support the basic enterprise of the service, particularly for inter-operability and other issues of security.

So that's pretty much where we went. As was explained, we acted really quickly. We did that because the performance contract was ready for signature. We were out of the process of a PBD cycle. This was an issue that came with the DRI and Dr. Hamre was ready to act. So working with John Evans' folks, we put it in place in about a month. It was about that quick.

So very rarely does that kind of movement happen in the Pentagon. It's typically more glacial. However, in this case, it was put in place very, very quickly. Really in the space of about a month to two months. Part of it was just the timing of the cycle.

So what do we have? I just have one slide, and just a closer. Go to the next slide. I talk with our folks who look at this and ask them to pull out some numbers to see how we're doing on DISN. What we're able to find out is in the Army, we can and we have programmed for tier one all the way through the program period.

In other words, we've essentially established that rate and booked it for the tier one costs. We have that set and we've essentially got that in the present budget locked. That's roughly around 44 to 45 million dollars per year. The tier two, though, is more challenging.

This goes back to some of the work we did with working capital fund programming back in the 1998 period, where we tried to match customer revenues with expected revenues, or expected revenues from the business area. One of the areas we looked at with many of you folks from the DISA team was whether we could match what the customer thought they were going back from what, in this case, DISA thought they were going to get.

We worked with comptroller and worked on pulling out the data. Can we match? Can you go to the budget documents on both sides of the OP32 report and the fund 11 and could you get a match? Once you make that match, could you extend it?

We found it very challenging for DISA. What we could come up with is roughly about a 2/3 match where we could find a dedicated customer dollar to what DISA thought they would get. In many cases, DISA numbers were right because they had historical information of what they were going to see.

What you tend to see, particularly in the area of programming and even to a degree with budgeting, you don't fully program or budget for DISA. It may well be there in the analagous pot of O&M dollars, but you can't directly ascribe or attribute to dollars.

So you get in all kinds of issues - have you programmed or budgeted the right amount of money? There is a sense of matching for the budget perspective. You try to match it. If you look back historically, you tend to find, particularly for DISA, more dollars migrating over. That's what we saw for both 2000 and 2001. As best as we could judge we programmed about 60 to 70 million for tier two, and about 95 to 100 showed up there.

The local customer buys more services through DISA than we can attribute. Over time, as you get better execution data, you hope you can match that. It's just part of the migration issues you see. Clearly we saw this in DISA.

I've just showed you on the top line, we do program and budget for tier one. We've got those numbers laid out in the PB lock for tier one. For tier two, we ran out of time before I came over here, but it wasn't easy to get those numbers. We do have DISN programmed. Go to Fidelity to get those numbers quickly.

Tier one is a known number and we go ahead and program and budget for it. Has it been successful? From the migration of systems, it's probably stopped some of that. Although as best as I can tell with my year on the Army staff, we didn't have too much of a problem with that. I think we were pretty much on board with what DISN was doing.

Have we gotten more business towards it? I once again can't tell. These two data points, as I said are problematic because you have migration in general with the DISN two tier dollars that are heavier in execution than we typically see in the program and in the budget. But I think it's kind of early to say.

We like the prices and we also like the TOA allocation. It wasn't a problem - we thought it was a great idea. So from those two views, we were fine with it. From that case, we're generally happy with it. The prices, we believe, have stopped the folks buying around it. In general, the allocation is something we can live with the Army.

What's interesting, though, is the congressional language that's come out of the latest budget. This is from the Senate Appropriations Committee, which either has defined complete success for two tier pricing because they've gone ahead and moved the money to DISA, or perhaps we've just finished with it. I'll just show you the language.

What we think has happened since the tier one dollars are going to be migrated over directly to fund, directly to DISA for the DISA O & M account. Is that about right? But for '02 - we're going to have that discussion. But I find the language rather fascinating. Partly, the appropriators needed some money and they found a way to word it.

It's kind of revealing about the whole process in general. It talks about the Senate's view, their report and it's kind of double speak, isn't it? On one hand, they describe it as we've described the intent. Essentially it is to do a better job of displaying the costs and to get more representative service to the customer. In their words it was not successful.

Comment: No, that's not it. I think they're telling you that they can't see because they control appropriations, not working capital funds. They can't see what you're doing and they don't like it. Again, I'd keep it simple on this one. I wouldn't read a lot into that.

Don Tison: I also think it's interesting that they took 24.7. Maybe all they wanted was a finer way to get some extra money, and they may have done that.

Comment: This is the second year we had staff chatter on this issue, though, I think?

Don Tison: But this was upheld in conference so at least for '02, we've gone ahead and had to move the money. This is a little more directive than the last one. One can declare in a way success for this because it recognizes the two-tier concept. On the other hand, it represents a challenge for us in the future of how we're going to handle it. I think that's all I would say. I was surprised to see it in the final language.

Carl Dahlman: Okay. A couple of remarks, and then we'll open it up for discussion. There's a way to approach two-tier pricing that I think an economist would like in many ways. It is to say here's an activity and what I'm going to do is first make sure my overhead is funded appropriately. I'm going to charge an entry fee and charge that back to my customer in some way. Then I'm going to price my services according to the marginal variable costs, so I cover all my costs that way.

That's not how we're doing two tier pricing here. I would argue there are two areas in the department where we are successfully doing two-tier pricing. We've just talked about one of them here. The other will be the transportation working capital fund, and they both begin with the same concept.

Here's a core activity and we are going to keep this in house. We're going to source this by providing it in house. We don't begin by funding overhead costs. We begin exactly in the other end. We set a market price, which is equal to or less than the market price. Then after that's all done, we count the revenues and figure out how much overhead we've now got to kick in to cover total cost of the activity.

That's a very different scheme from the first one that I outlined and it works. It works because it creates incentives to hold the customers on the reservation. When you have decided this is a core activity that you do want to use in peacetime, you have it prepared and ready for wartime.

Where with the working capital fund, and whether it's working capital fund or not, we have problems when the sourcing decision is continuously open for discussion. That's when we have not made the decision, or when we have trouble enforcing the decision that this is a core activity, like we do with depots.

We're saying the depots are a national asset. We are going to fund them. They will be there by hook or crook. Yet that is a solution that nobody is quite happy with, so there's almost this tug of war between privatization and outsourcing. Who is paying who what and why are they losing money?

The real sensitive discussions on those issues have to do with how much of this story you want to do. I would argue we have this animal that once we've decided what a core activity is, two-tier pricing works very well to keep people on the reservation.

On the other hand, if you've made the decision to keep it in house, then one questions is why not directly appropriate the money to it and fund it that way? The argument is exactly the one I gave. With two tier pricing you can keep people on the reservation and not go outside. You can get utilization and core capacity when you decide you are going to keep it in house.

There's another rationale of two tier pricing, which is very, very different. That has to do also with incentives for behavior and customer control. One of our favorite services that I work with off and on is now talking about doing two tier pricing for depot level repairables.

They will charge the consuming major commands a fixed overhead and then they will charge essentially a price equal to marginal variable cost. They will cover all cost of operation in the depot. The reason for that is really nothing to do with efficiency and demand, which changed the quantity demanded as you would in a private market because we are running requirements-based system.

We want the customer to come in and use the capacity of the depot and send all his assets up there so they get prepared on time and get back. The reason this service is pursuing it, I believe, is that they have found that the major commands will argue in their budget and POM process for a certain amount of money to put into DLR repair costs.

Then when execution comes, there's a fat lump of money sitting there. We'll find reasons to migrate money to activities which they have asked for to be funded in the POM, that have been denied either by the mother service or by OSD or by congress. They will find in execution that because we have this lump of money which includes both fixed and variable costs, that's a nice fat target to go after.

By two tier pricing it, we are taking out all of the fixed costs and putting them aside. What the major command is left with is a smaller sum of money that only will fund the variable cost, the marginal variable cost of fixing the items. That reduces the ability of the command to divert the money to other things.

You can stick to the bargain, this is what we're going to send up and actually repair in the depots. That's a completely different argument for two tier pricing. Both of them, I think, have validity in DoD. The core competency, funded with market base price, pay the overhead afterwards. Or, in the other case, if you really want to stop people from migrating money, charge the overhead separately and then leave them with less money to divert to other activities.

Okay, with that it's time for all of you to chime in and take a bite at it.

Stan Horowitz: We were talking about marginal costs about setting prices at the commercial level. It's not clear those two are the same. Would any of the panelists like to comment on that? Obviously, the closer marginal cost is to zero, the better the idea of just putting this all in the DISA budget. It's a lump sum. The only reason for worrying about pricing is if there is a marginal cost that matters. Would anyone like to comment on that?
Carl Dahlman: Can you first tell us how the estimate marginal cost in the Department of Defense?
Stan Horowitz: As a whole - about $340 billion.
Carl Dahlman: That was a cheap shot - I apologize. Does anyone want to talk a bit?
Don Tison: Stanley we tried – we really did. Both from the front-end assessment, we really tried to see if we could get at the costs and just didn't have the data to be able to get at it. We ended up trying to match comparative benchmarks for the tier two pricing. It wasn't something that was disregarded; we just couldn't get there.

The challenge is how much capacity, readiness, or whatever type of bucket you want to put it in do you want outside of what you could find in the commercial market. It's very challenging - how much capacity is readiness based versus need based?

Stan Horowitz: Well, another way of spinning it would be to think about what is the elasticity of demand? How much difference does it make? If we priced it at zero, would the use of the system go up a half percent, 15 percent, and 40 percent? Do we have any insight into that?

Adm Hutten: The basis of this wasn't so much economic theory as it was pricing incentive for people. The way we estimated the tier one was to look at what the joint staff said to keep the surge and we try to engineer our systems to that. So they gave us a figure.

We have vendors estimate the cost when they come in with bids providing certain things over and above what I'll call vanilla comservice. What does it cost to keep cleared people around all the equipment?

What does it cost to do diverse routing? What does it cost to put extra physical protection around certain assets? What does it cost to separate our traffic from traffic that could disrupt ours under certain circumstances? We ask them for those types of estimates and that came out in and of itself about 12 percent of the total cost.

So we went back, we made some estimates, and that's all they were. The only thing that was important was that we got somewhere in the ballpark. The real driver here wasn't whether you could separate tier one from tier two exactly. It was whether you were going to place some type of incentive in the system.

As Deborah mentioned earlier, the major benefit I see from this is it got the discussion on the right thing. This is a military network, what's military about it? Well, as the admiral says, getting the Diego Garcia - when you have to price Diego Garcia as the same average cost as getting to Stutgart, people cream skim. People cream skim hard when you just had average costs for things.

What happens is they say - ah, well, we want to connect to the SIPRnet to get to Diego Garcia. DISA - you do that for us. By the way, when we go to San Diego to San Francisco, we're going to take care of that. So you get left with all the really hard things to do.

Over time what happens is you have no enterprise network. You don't have network centric warfare. You don't know what your security is going to be. So the whole thing was how do I keep the core of this thing - there's a policy that says use DISN.

So the question is, how do you do that? I would probably appropriate the whole thing and get it over with because I think it's a war-fighting network. I know right now it has a role in not just defensive information warfare, but offensive information warfare.

So it is, as the admiral said, just a weapons system today. It just happens to be what you're doing as firing cyber bullets. When the chairman of the joint chiefs stands up and says, “Hey, it's bandwidth, not bombs, stupid," you got some idea of what he thinks of the role of communications in war. So you're there with that.

Dave McNicol: One of the things you've got to keep in mind here - and I think I can speak to why we did some of this - it isn't just one product. It's voice, it's data, it's video, and one other. You've got a common cost problem. Life is too short to find the marginal cost of four products and common cost. You're really worried about cross subsidization. Going to a commercial rates structure is a good quick and dirty way of solving that problem and giving your users a fairly cost based incentive structure.
Comment: I'd agree with that. When you look at formal pricing theory for public utilities, there's this concept of Ramsey pricing, which is what you're talking about. Where you relate the cross subsidization to the elasticities in place.
What I hear the folks talking about here is that where there's a commercial alternative, the elasticity is extremely high, so you don't want to let your price go above the commercial alternative in that situation.

Comment: If in fact when we're buying these services from the commercial sector, it's at a zero cost, then maybe not charging for tier two is the right thing to do. But what I hear them saying is we have a certain amount to cover. We're not going to lose anything by charging this price. It's very similar to the DWCF price that's charged for military transportation. It's figured out exactly the same way for the same reason.
Question: Okay, I want to go back. I don't know what was behind that comment there. From a Congressional perspective, the notion that working capital funds have made costs more visible is just not so at all. Just make that real clear. I'm an economist, so I have all the love for the warm, blue, furry creature.

It certainly hasn't made costs more visible. There's a lot to be said, possibly, if you do go to two tier pricing for making the one part then just a direct appropriation to that agency, or to that support group.

One thing to think about when we talk about oversight here for the defense agencies is how can you put together a simple document - so that Congress can have some sense of what's happened in these organizations. In the long run, a little more visibility might be good for you.

Right now, the only thing I get are these stacks of volumes from each working capital fund that are anything but informative. I'm sure they're good for accountability, for financial integrity they serve many roles. In terms of oversight, it just doesn't give you that kind of picture.

Bob Hutten: I'll relate this more to my Navy experience than my DISA experience, though it's true there too. The cost picture in a working capital fund, you're viewing it in this room. Most of the people are viewing it in this room from the point of view of oversight.

The real advantage of working capital fund for people who manage things like public work centers is that they have product managers and managers who actually think about costs. That they don't think about the money they have as a declining checkbook. I have so much money, I'm going to spend it all. That's the real advantage.

The real advantage of pricing correctly, besides the incentives, is that it serves as an appetite suppressant and it causes people to think about what they're going to buy. It makes them smarter in terms of the way they allocate their own resources.

The intelligence community funds all its comm appropriated. DISA has a DWCF mechanism. We could share comm much more effectively, and we're working on that, than we do today.

One of the major things that keeps us from doing it is one of us is a ship intermediate maintenance activity, and the other one is a shipyard. When you have two mechanisms that are different in funding, because to a person in the intelligence community, all they see is this money in a budget. It's invested, it's sunk. Somebody else is going to let me ride on it free when we're doing full costing.

We have these real anomalies that play. The intelligence community owns more comm than the rest of DoD. They're not any small communications network. When you have these anomalies like that, you get all sorts of strange behavior that goes on. You get non-economic things happening.

You've got to clean up in DoD the policy basis for how you're going to charge for certain types of things. Either it should be all DWCF or all appropriated. When it's not and people can deliver equivalent services, there's always going to be this strange behavior going on.

Adm Nutwell: Let me just make a comment. We've been talking a lot about cost and pricing, but there's another important measure that needs to be considered. That's quality of service. The responsiveness of the service. I'm not saying it's critical at DISA, but this is a factor in the elasticity of demand. It's a factor in everything we're talking about, whether the quality of the service is there to meet the customer. So you just can't talk about cost or price.

Q: I had looked at about a year and a half ago for CNA - this is cost structure. We came up with very different results and the panel presented - it's closer to what you said, Carl, about the tier two should be marginal costs and it wasn't. It's not clear there. It wasn't that they were using commercial rates as a proxy. They were using it - somebody had mentioned - as incentive. They were pricing it fairly arbitrarily below commercial rates, even below GSA's rates.

The indication was the reason you want it at marginal cost and don't want it below, is if you have it below, you may have too much use. You may have too much congestion. That appeared to be the case. At that time, at least a year and a half ago, rates and response rates, at least between the coasts in the U.S., was very slow compared to other networks.

Carl Dahlman: Was that a peak load phenomenon?
Speaker: If your peak load was from 9 a.m. to 5 p.m., that's a steady state. The issue about the surge capacity, at that time being part of this unique DISN requirement, at that time it was 23 percent. And when we went through the numbers of how they calculated the tier one-fixed costs, they said this whole 23 percent was a fixed cost. And they took 23 percent of the cost and it went directly into tier one.

I know that every network has a surge capacity. I can pick up the phone on Mother's Day and call my mom and I don't usually - unless one of my siblings is calling, I don't usually have a problem. So it's very easy to rig the system and put things in fixed costs.

It may very well be that the reason for this, as somebody had mentioned, was because we have some very expensive bases. It's very expensive to hook up things in Diego Garcia and we're charging one price for everyone. That's probably where the cross subsidy creates a problem.

It's probably better to recognize that up front and if there is a high expense hooking up Diego Garcia, that's part of the expense of operating from there. That ought to be as part of their base budget as opposed to somehow cross subsidizing and winding up with too much peak load between San Francisco and New York so that you can accommodate Diego Garcia.

Bob Hutten: Let me just explain some of the realities of defense budgeting for a second. The reality is that the lower you are on the chain, everybody above you siphons off stuff. The poor bastard down in Diego Garcia gets about 80 percent of what he was supposed to get in the first place. And yet he's the person at the far end of the whip that you ought to support the most.

Having been out at the far end of the whip, I can absolutely attest to that. So all this is theoretically true. It just doesn't work in the real world. In the real world, we are providing Iridium services to special ops guys sitting out in the field today conducting operations against the Al Qu’aeda and Taliban.

I am really not worried about their marginal costs. I'm worried about their survival. And I'm not going to worry about billing them by the minute. In a mission organization, you do the defense mission first.

That's where we are as far as "rigging." There is no rigging. We took the total cost of what we had when we only had one tier in pricing and we divided it up into two tiers to incentivize. If you don't like 25 percent, make it 30. If you don't like 30, make it 22. I don't care. The point is, you're incentivizing people to behave differently. Not whether I can allocate and split a cost down to the last atom. That's not the point of the whole thing.

Adm Nutwell: The point you raise is good. If you set the rates artificially low or even down to zero, then you've got a different problem. You've got an allocation problem. You have to have some other allocation mechanism if you're going to use those artificially low rates.

Carl Dahlman: I like Bob's implicit idea of giving the money to the guys with the whip out there and they can pay for their overhead, their bosses and their major commands and the headquarter staffs. Whatever they want to buy, they can pay that way.

Question: I thought you were going to explain from your Navy experience down at the public works center in Norfolk. How did you circumvent the DISA bill when you were trying to maximize the utility of your funds, or did you?

Bob Hutten: Let me tell you. The bill came at a central level to Norfolk, so I didn't see the DSN bill down there. We did have a lot of analogs to what we're doing. Let me explain the crane one a little bit that Deborah was talking about.

When you provide cold iron support to a ship, you have to have all sorts of different cranes. Things that can pick up nuclear stuff, things that can do ordinance-handling, things that can go out into the bay and do it in choppy waters. And you've got to have specially trained and specially cleared crews to do that.

Now it's true. Somebody can go out and buy an hour of commercial crane service cheaper. But when it came time to actually go to war, you needed the trained crews, the larger cranes, the extra crane capacity. Because what you had was a $7 billion asset, a carrier and everything at a pier, waiting for service from a $700,000 asset. Which made no sense at all.

If you optimize the crane support, you can't go to war. My point earlier is if you don't look at the whole system of what you're trying to do, what is it we're really trying to accomplish with the DISN? If you don't look at the whole system of what the cranes are trying to do, you make mistakes.

If you take too narrow a view of this about what the mission of the department is and how you fit in, you're going to make mistakes when it comes to the mission of the Department of Defense.

Carl Dahlman: We will end on that note. Thank you very much. I think that DISN two tier pricing is ultimately a success story. The customer is happy, OSD had a good idea and then we have a great implementer of it. It's too bad we haven't quite sold it to Congress yet, but I think that remains.

I just want to pick up on one final statement that Bob said. He said we didn't do this for reasons of economic analysis. We did it for reasons of efficiency and incentives. And I love that, because that means that the more people actually pick up on that message, the more we can put all these two handed economists out to pasture permanently.